

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave.St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-026346**Date Inspected:** 15-Apr-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 1500**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 300**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC) Changxing Island **Location:** Shanghai, China**CWI Name:** Lv Li Qing**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Vikram Singh was present during the times noted above for observations relative to the work being performed at ZPMC.

**WELDING**

OBG Bay 14

This QA Inspector randomly observed the following work in progress:

**Shielded Metal Arc Welding (SMAW)**

This QA Inspector observed the welding operation per the SMAW process on a weld joint identified as SEG3020U-563 located on edge plate to anchor plate of the OBG Segment 14W. The welder is identified as 069841. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with WPS-B-P-2214-Tc-U4b-FCM-1.

This QA Inspector observed the welding operation per the SMAW process on a weld joint identified as SEG3020X-006 located on longitudinal diaphragm to deck plate of the OBG Segment 14W. The welder is identified as 066261. ZPMC Quality Control (QC) is identified as Mr. Zhang Lin. The welding variables recorded by QC appeared to comply with WPS-B-P-2214-Tc-U4b-FCM-1.

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This QA Inspector observed the welding operation per the SMAW process on a weld joint identified as SEG3020C-042 located on SA to floor beam of the OBG Segment 14W. The welder is identified as 067942. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with WPS-B-P-2214-Tc-U4b-FCM-1.

This QA Inspector observed the welding operation per the SMAW process on a weld joint identified as SEG3020AQ-025 located on edge plate to anchor plate of the OBG Segment 14W. The welders are identified as 066361 and 045246. ZPMC Quality Control (QC) is identified as Mr. An Qing Xiang. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-1G (1F)-FCM-Repair and B-CWR-2923.

### Flux Cored Arc Welding (FCAW)

This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as SEG3020H-005 located on deck panel diaphragm to deck panel diaphragm of the OBG Segment 14W. The welder is identified as 048433. ZPMC Quality Control (QC) is identified as Mr. Zhang Lin. The welding variables recorded by QC appeared to comply with WPS-B-T-2233-ESAB.

This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as SEG3020F-011 located floor beam flange to deck panel diaphragm of the OBG Segment 14W. The welder is identified as 066673. ZPMC Quality Control (QC) is identified as Mr. Zhang Lin. The welding variables recorded by QC appeared to comply with WPS-B-T-2232-ESAB.

This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as SEG3020L-015 located on anchor plate to deck panel diaphragm of the OBG Segment 14W. The welder is identified as 201215. ZPMC Quality Control (QC) is identified as Mr. Zhang Lin. The welding variables recorded by QC appeared to comply with WPS-B-T-2232-ESAB.

This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as SEG3020V-029 located on anchor plate to deck panel diaphragm of the OBG Segment 14W. The welder is identified as 067876. ZPMC Quality Control (QC) is identified as Mr. Zhang Lin. The welding variables recorded by QC appeared to comply with WPS-B-T-2232-ESAB.

This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as SEG3020D-024 located on deck panel diaphragm to deck panel diaphragm of the OBG Segment 14W. The welder is identified as 067888. ZPMC Quality Control (QC) is identified as Mr. Zhang Lin. The welding variables recorded by QC appeared to comply with WPS-B-T-2233-ESAB.

This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as TR3015TR1-001-002 located on traveler rail. The welder is identified as 066421. ZPMC Quality Control (QC) is identified as Mr. Sun Tianliang. The welding variables recorded by QC appeared to comply with WPS-B-T-2233-ESAB.

This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as TR3005TR1-001-013 located on traveler rail. The welder is identified as 045175. ZPMC Quality Control (QC) is

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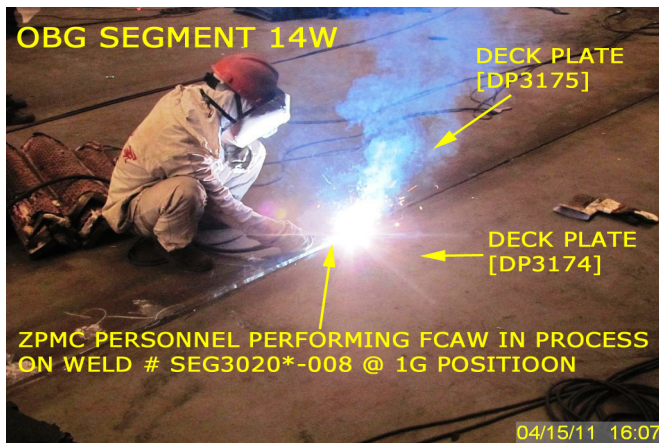
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identified as Mr. Sun Tianliang. The welding variables recorded by QC appeared to comply with WPS-B-T-2233-ESAB.

This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as TR3021TR3-001-011 located on web to flange of the traveler rail. The welder is identified as 045240. ZPMC Quality Control (QC) is identified as Mr. Zhang Lin. The welding variables recorded by QC appeared to comply with WPS-345-FCAW-3G (3F)-ESAB-Repair and B-WR20711.

This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as SEG3020\*-008 located on deck panel to deck panel of the OBG Segment 14W. The welder is identified as 066734. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with WPS-B-T-223(2) IT-ESAB-1. For more details please see attached photo below:

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.



### Summary of Conversations:

No relevant conversations were reported on this date.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 15000422372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Singh,Vikram	Quality Assurance Inspector
<b>Reviewed By:</b>	Patterson,Rodney	QA Reviewer

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